

**ABSTRACT**

A method for assessing the integrity of a structure, comprising the steps of: i) collecting data relating to the initial dimensions of the structure, ii) creating a computer model of the structure, iii) collecting data relating to the estimated load on the structure, iv) analysing the structure, using the computer model of the structure and the load data, in order to define areas which are subject to relatively high stress, v) measuring, after a time interval, the dimensions of the structure in high stress areas, vi) updating the computer model of the structure, using the results of step v), re-analysing the structure, using the updated computer model and the load data, in order to calculate a value for the integrity of the structure.